

**Amendments To The Claims:**

This listing of the claims will replace all prior versions and listings of the claims in the application.

**Listing of the Claims:**

1.     **(Canceled)**

2.     **(Currently Amended)** ~~The apparatus in claim 1,~~ A 2D data collection sensor comprising:

an image sensor; and

an illumination module coupled to the image sensor, the illumination module comprising a plurality of reflectors that reflect lights of a light source and collectively generate a uniform illumination pattern with sharp edges both for illuminating a target data area and providing visual aiming assistance, wherein there is a distinct light source element per reflector, wherein each reflector comprises an opaque reflective surface with an aperture formed by the reflective surface, the light source emits light onto the reflective surface and through the aperture onto the target data area, wherein a curvature and shape of the reflective surface is curved for optimal uniformity and sharp edges of the illumination pattern; wherein each illumination pattern generated by each reflector matches all other illumination pattern generated by all other reflectors and collectively generate a uniform illumination pattern.

3.     **(Previously Presented)** The apparatus in claim 2 wherein the uniform illumination pattern matches the field of view of the image sensor.

4.     **(Currently Amended)** ~~The apparatus in claim 1,~~ A 2D data collection sensor comprising:

an image sensor; and  
an illumination module coupled to the image sensor, the illumination  
module comprising a plurality of reflectors that reflect lights of a light source and  
collectively generate a uniform illumination pattern with sharp edges both for illuminating  
a target data area and providing visual aiming assistance, wherein there is a distinct light  
source element per reflector, wherein each reflector comprises a transparent solid with a  
reflective internal surface, light from the light source enters the solid, is reflected by the  
reflective surface and exits through the solid onto the target data area, wherein a  
curvature and a shape of the reflective is curved for optimal uniformity and sharp edges  
of the illumination pattern,; wherein each illumination pattern generated by each reflector  
matches all other illumination pattern generated by all other reflectors and collectively  
generate a uniform illumination pattern.

5.     **(Previously Presented)** The apparatus in claim 4 wherein the uniform  
illumination pattern matches the field of view of the image sensor.

6.     **(Previously Presented)** The apparatus in claim 2, wherein the light source  
comprises an LED.

7.     **(Canceled)**

8.     **(Currently Amended)** ~~The apparatus in claim 7~~ A 2D imaging barcode  
reader comprising:

an image sensor; and  
an illumination module coupled to the image sensor, the illumination  
module comprising a plurality of reflectors that reflect light of a light source and  
collectively generate a uniform illumination pattern with sharp edges both for illuminating

a target data area and providing visual aiming assistance for a target barcode, wherein there is a distinct light source element per reflector, wherein each reflector comprises an opaque reflective surface with an aperture formed by the reflective surface, the light source emits light onto the reflective surface and through the aperture onto the target data area, wherein a curvature and shape of the reflective is curved for optimal uniformity and sharp edges of the illumination pattern;<sub>;</sub> wherein each illumination pattern generated by each reflector matches all other illumination pattern generated by all other reflectors and collectively generate a uniform illumination pattern.

9. **(Previously Presented)** The apparatus in claim 8 wherein the uniform illumination pattern matches the field of view of the image sensor.

10. **(Currently Amended)** ~~The apparatus in claim 7~~ A 2D imaging barcode reader comprising:

an image sensor; and

an illumination module coupled to the image sensor, the illumination module comprising a plurality of reflectors that reflect light of a light source and collectively generate a uniform illumination pattern with sharp edges both for illuminating a target data area and providing visual aiming assistance for a target barcode, wherein there is a distinct light source element per reflector, wherein each reflector comprises a transparent solid with a reflective internal surface, light from the light source enters the solid, is reflected by the reflective surface and exits through the solid onto the target data area, wherein a curvature and a shape of the reflective surface is curved for optimal uniformity and sharp edges of the illumination pattern;<sub>;</sub> wherein each illumination pattern generated by each reflector matches all other illumination pattern generated by all other

reflectors and collectively generate a uniform illumination pattern.

11. **(Previously Presented)** The apparatus in claim 10 wherein the uniform illumination pattern matches the field of view of the image sensor.

12. **(Previously Presented)** The apparatus in claim 8, wherein the light source comprises an LED.

13. **(Canceled)**

14. **(Canceled)**

15. **(Canceled)**